

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1, 6, 10 and 15 as follows:

LISTING OF CLAIMS:

1. (Currently Amended) An image processing apparatus, comprising:
an input unit successively receiving, as inputs, image signals representing pixels;
an error memory storing error values of pixels of interest;
a determining unit determining whether an input signal represents a white pixel; and
an error diffusion processing unit which, when the input signal represents a white pixel, outputs a signal representing a white pixel and clears the error memory of the pixel of interest so that ~~does not perform~~ calculation of an error and subsequent distribution of the error to pixels, ~~when the input signal represents a white pixel is not performed,~~
wherein said error diffusion processing unit performs error diffusion process using a single threshold value in a binarization process smaller than a single central value of possible values of said image signal.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) The image processing apparatus according to claim 1, wherein

said error diffusion processing unit changes the threshold value in accordance with a magnitude of the signal input through said input unit.

5. (Previously Presented) The image processing apparatus according to claim 1, wherein

said error diffusion processing unit performs a process of subtracting a prescribed value before distributing a calculated error, and adding the prescribed value before performing thresholding.

6. (Currently Amended) An image processing apparatus, comprising:
an input unit successively receiving, as inputs, image signals representing pixels;

an error memory storing error values of pixels of interest;

a determining unit determining whether an input signal represents a black pixel; and

an error diffusion processing unit which, when the input signal represents a black pixel, outputs a signal representing a black pixel and clears the error memory of the pixel of interest so that does not perform calculation of an error and subsequent distribution of the error to pixels, ~~when the input signal represents a black pixel~~ is not performed,

wherein said error diffusion processing unit performs error diffusion process using a single threshold value in a binarization process higher than a single central value of possible values of said image signal.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) A method of image processing, comprising the steps of:

successively inputting image signals representing pixels;
determining whether an input signal represents a white pixel; and
error diffusion process step of outputting a signal representing a white pixel and clearing an error memory of the pixel of interest wherein not performing calculation of an error and subsequent distributing of the error to pixels[[,]] is not performed when the input signal represents a white pixel,

wherein said error diffusion process step performing error diffusion processing using a single threshold value in a binarization process smaller than a single central value of possible values of said image signal.

11. (Cancelled)

12. (Cancelled)

13. (Previously Presented) The method of image processing according to claim 10, wherein

in said error diffusion process step, the threshold value is changed in accordance with a magnitude of the signal input in said input step.

14. (Previously Presented) The method of image processing according to claim 10, wherein

in said error diffusion process step, a process is performed in which a prescribed value is subtracted before distribution of calculated error, and the threshold value is added before thresholding.

15. (Currently Amended) An image processing apparatus, comprising:
an input unit successively receiving as inputs, image signals representing pixels;

an error memory storing error values of pixels of interest;

determining unit determining whether an input signal represents a white pixel or a black pixel; and

an error diffusion processing unit which, when the input signal represents the white pixel or the black pixel, outputs a signal representing the white pixel or the black pixel and clears the error memory of the pixel of interest, wherein does not perform calculation of an error and subsequent distribution of the error to pixels, when the input signal represents the white pixel or the black pixel is not performed,

wherein said error diffusion processing unit performs error diffusion process using a single threshold value in a binarization process and changes the threshold value based on a relationship between the input and the threshold value, and

wherein the relationship is that the threshold value increases depending on the increase of the input.

16. (Previously Presented) The image processing apparatus of claim 15, wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process smaller than a central value of possible values of said image signal when the input signal represents the white pixel.

17. (Previously Presented) The image processing apparatus of claim 15, wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process higher than a central value of possible values of said image signal when the input signal represents the black pixel.